IN THE CLAIMS:

Applicants amended claims 1, 5, 10, 16, 22, 28, 32. Applicants neither added nor canceled any claims.

The listing of claims replaces all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A method comprising:

storing data of a first data transfer rate defined by a first transmission standard in a synchronous storage device of a network element, the synchronous storage device having a first storage area;

transmitting the data of the first data transfer rate to an asynchronous storage device of the network element;

storing the data of the first data transfer rate in the asynchronous storage device having a second storage area, wherein the first storage area is larger than the second storage area; and

outputting the data of the first data transfer rate defined by the first transmission standard from the asynchronous storage device at a second data transfer rate defined by a second transmission standard.

2. (Original) The method of claim 1, wherein the synchronous storage device is a synchronous first-in-first-out register array.

3. (Original) The method of claim 1, wherein the asynchronous storage device is an asynchronous first-in-first-out register array.

4. (Original) The method of claim 1, wherein the first data transfer rate is greater than the second data transfer rate.

5. (Currently Amended) An apparatus comprising:

a synchronous storage device of a network element coupled with a network ring, the synchronous storage device to store data received at a first data transfer rate defined by a transmission standard;

an asynchronous storage device of the network element coupled with a network ring, the asynchronous storage device coupled to the synchronous storage ~~device,~~device; and

control circuitry coupled to the synchronous storage device and to the asynchronous storage device, wherein the control circuitry is to transmit the data at the first data transfer rate from the synchronous storage device to the asynchronous storage device and wherein the control circuitry is to output the data from the asynchronous storage device at a second data transfer rate defined by a second communication transmission standard.

6. (Original) The apparatus of claim 5, wherein the synchronous storage device is a synchronous first-in-first-out register array.

7. (Original) The apparatus of claim 5, wherein the asynchronous storage device is an asynchronous first-in-first-out register array.

8. (Original) The apparatus of claim 5, wherein the first data transfer rate is greater than the second data transfer rate.

9. (Original) The apparatus of claim 5, wherein a storage area of the synchronous storage device is larger than a storage area of the asynchronous storage device.

10. (Currently Amended) A method comprising:

performing a process on a first network element of a communication system, the first network element coupled with a second network element, the process including:

receiving data at a first data transfer rate at the first network element of the communication system;

storing the data at the first data transfer rate in a synchronous storage device having a first storage area;

processing the data at the first data transfer rate stored in the synchronous storage device, wherein the processing includes:

removing the data from the synchronous storage device;

storing the data at the first data transfer rate in an asynchronous storage device having a second storage area;

transmitting the data out from the asynchronous storage device at a second data transfer rate to match the data rate of the second network element, wherein the first storage area of the first storage device is larger than the second storage area of the asynchronous storage device.

11. (Original) The method of claim 10, wherein the data of the first data transfer rate is included in a signal using the Synchronous Optical Network (SONET) standard.

12. (Original) The method of claim 10, wherein the data at the second data transfer rate is included in a signal using the Data Signal (DS)-3 standard.

13. (Original) The method of claim 10, wherein the synchronous storage device includes a synchronous first-in-first-out register array.

14. (Original) The method of claim 10, wherein the asynchronous storage device includes an asynchronous first-in-first-out register array.

15. (Original) The method of claim 10, wherein the first data transfer rate is faster than the 2 second data transfer rate.

16. (Currently Amended) An apparatus comprising:

a synchronous storage device of a network element coupled with a network ring, the synchronous storage device having a first storage area and coupled to receive data at a first data transfer rate defined by a communication transmission standard;

an asynchronous storage device of the network element coupled with the network ring, the asynchronous storage device having a second storage area and coupled to the synchronous storage device, wherein the first storage area is larger than the second storage area; and

control circuitry coupled to the synchronous storage device and the asynchronous storage device, wherein the control circuitry is to transfer the data at the first data transfer rate from the synchronous storage device to the asynchronous storage device when the second storage area is not full and wherein the control circuitry is to output the data from the asynchronous storage device at a second data transfer rate defined by a second transmission standard.

17. (Original) The apparatus of claim 16, wherein the data of the first data transfer rate is part of a signal using the Synchronous Optical Network (SONET) standard.

18. (Original) The apparatus of claim 16, wherein the data at the second data transfer rate is part of a signal using the Data Signal (DS)-3 standard.

19. (Original) The apparatus of claim 16, wherein the synchronous storage device includes a synchronous first-in-first-out register array.

20. (Original) The apparatus of claim 16, wherein the asynchronous storage device includes an asynchronous first-in-first-out register array.

21. (Original) The apparatus of claim 16, wherein the first data transfer rate is faster than the second data transfer rate.

22. (Currently Amended) A method comprising:

receiving data based on a Data Signal (DS)-3 standard from a payload of Synchronous Optical Network (SONET) frames, wherein the SONET frames are being transmitted on an Optical Carrier (OC) signal;

extracting the data based on the DS-3 standard from the payload of the SONET frames;

storing the data in a synchronous first-in-first-out register array (FIFO) having a first storage area;

transferring the data from the synchronous FIFO to an asynchronous FIFO having a second storage area, wherein the first storage area is larger than the second storage area; and

outputting the data based from the asynchronous FIFO at a DS-3 data rate on a T3 signal.

23. (Original) The method of claim 22, wherein the OC signal includes an OC-48 signal.

24. (Original) The method of claim 22, wherein the OC signal includes an OC-3 signal.

25. (Original) A line card on a network element comprising:

a synchronous first-in-first-out register array (FIFO) having a first storage area and coupled to receive data based on a Data Signal (DS)-3 standard from a payload of Synchronous Optical Network (SONET) frames, wherein the SONET frames are being transmitted on an Optical Carrier (OC) signal;

an asynchronous FIFO having a second storage area and coupled to the synchronous FIFO, wherein the first storage area is larger than the second storage area; and

control circuitry coupled to the synchronous FIFO and the asynchronous FIFO, wherein the control circuitry is to transfer the data from the synchronous FIFO to the asynchronous FIFO when the second storage area is not full and wherein the control circuitry is to output the data from the asynchronous FIFO at a DS-3 data rate on a T3 signal.

26. (Original) The line card of claim 25, wherein the OC signal includes an OC-48 signal.

27. (Original) The line card of claim 25, wherein the OC signal includes an OC-3 signal.

28. (Currently Amended) A machine-readable medium that provides instructions, which when executed by a machine, cause the machine to perform operations comprising:

storing data of a first data transfer rate defined by a first transmission standard in a synchronous storage device of a network element, the synchronous storage device having a first storage area;

transmitting the data of the first data transfer rate to an asynchronous storage device of the network element;

storing the data of the first data transfer rate in the asynchronous storage device having a second storage area, wherein the first storage area is larger than the second storage area; and

outputting the data of the first data transfer rate defined by the first transmission standard from the asynchronous storage device at a second data transfer rate defined by a second transmission standard.

29. (Original) The machine-readable medium of claim 28, wherein the synchronous storage device is a synchronous first-in-first-out register array.

30. (Original) The machine-readable medium of claim 28, wherein the asynchronous storage device is an asynchronous first-in-first-out register array.

31. (Original) The machine-readable medium of claim 28, wherein the first data transfer rate is greater than the second data transfer rate.

32. (Currently Amended) A machine-readable medium that provides instructions, which when executed by a machine, cause the machine to perform operations comprising:

receiving data at a first data transfer rate at a first network element of a communication system;

storing the data at the first data transfer rate in a synchronous storage device having a first storage area;

processing the data at the first data transfer rate stored in the synchronous storage device, wherein the processing includes:

removing the data from the synchronous storage device;

storing the data at the first data transfer rate in an asynchronous storage device having a second storage area;

transmitting the data out from the asynchronous storage device at a second data transfer rate to match the data rate of a second network element, wherein the first storage area of the first storage device is larger than the second storage area of the asynchronous storage device.

33. (Original) The machine-readable medium of claim 32, wherein the data of the first data transfer rate is included in a signal using the Synchronous Optical

Network (SONET) standard.

34. (Original) The machine-readable medium of claim 32, wherein the data at the second data transfer rate is included in a signal using the Data Signal (DS)-3 standard.

35. (Original) The machine-readable medium of claim 32, wherein the synchronous storage 2 device includes a synchronous first-in-first-out register array.

36. (Original) The machine-readable medium of claim 32, wherein the asynchronous storage device includes a asynchronous first-in-first-out register array.

37. (Original) The machine-readable medium of claim 32, wherein the first data transfer rate is faster than the second data transfer rate.

38. (Original) A machine-readable medium that provides instructions, which when executed by a machine, cause the machine to perform operations comprising:

receiving data based on a Data Signal (DS)-3 standard from a payload of Synchronous Optical Network (SONET) frames, wherein the SONET frames are being transmitted on an Optical Carrier (OC) signal;

extracting the data based on the DS-3 standard from the payload of the SONET frames;

storing the data in a synchronous first-in-first-out register array (FIFO) having a first storage area;

transferring the data from the synchronous FIFO to an asynchronous FIFO having a second storage area, wherein the first storage area is larger than the second storage area; and

outputting the data based from the asynchronous FIFO at a DS-3 data rate on a T3 signal.

39. (Original) The machine-readable medium of claim 38, wherein the OC signal includes an OC-48 signal.

40. (Original) The machine-readable medium of claim 38, wherein the OC signal includes an OC-3 signal.